20-11-01.

PTO/SB/21 (04-04) Approved for use through 07/31/2006. OMB 0651-0031
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TRANSMITTAL **FORM** 

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Alexandria, VA 22313-1450 on the date shown below

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Total Number of Pages in This Submission

**Application Number** 10/787,060 02/25/2004 Filing Date First Named Inventor Akiyoshi AOYAGI Art Unit 2818 **Examiner Name** Thinh T. Nguyen Attorney Docket Number 9319S-000659

EV 717 344 888 US

Express Mail Label No.

| ENCLOSURES (check all that apply)      |                                     |   |  |        |   |  |
|--|-------------------------------------|---|--|--------|---|--|
| Fee Transmittal F                      | orm                                 | Drawing(s)                              |  |        | er Allowance Communication to chnology Center (TC)                    |  |
| Fee Attached                           |                                     | Licensing-related Papers                |  |        | peal Communication to Board of<br>peals and Interferences             |  |
| Amendment / Rep                        | ply                                 | Petition                                |  |        | peal Communication to TC<br>peal Notice, Brief, Reply Brief)          |  |
| After Final                            |                                     |   | Convert to a<br>Application                        | ☐ Pro  | prietary Information  |  |
| Affidavits/dec                         | laration(s)                         |   | ttorney, Revocation<br>Correspondence Address      | ☐ Sta  | tus Letter  |  |
| Extension of Time                      | e Request                           | Terminal D                              | isclaimer  |        | ner Enclosure(s) ase identify below):                                 |  |
| Express Abandonment Request            |                                     | Request for Refund  CD, Number of CD(s) |  |        | HDP 1449 Form; One (1) Foreign<br>Patent Document; Return<br>Postcard |  |
| Information Disclo                     | sure Statement                      |   |  |        |   |  |
| Certified Copy of Document(s)          | Priority                            | Remarks                                 |  |        |   |  |
| Response to Miss tncomplete Applic     | •                                   |   |  |        |   |  |
| Response to Parts under 3 1.52 or 1.53 |                                     |   |  |        |   |  |
|  | SIGNA                               | TURE OF APP                             | LICANT, ATTORNEY, O                                | R AGEN | Т   |  |
| Firm<br>or<br>Individual name          | or Harness, Dickey & Pierce, P.L.C. |   | Attorney Name G. Gregory Schivley / Bryant E. Wade | 2      | Reg. No.<br>27,382 / 40,344   |  |
| Signature                              |                                     | 9.                                      | hegy blust   | In     |   |  |
| Date                                   | October 7, 2005                     |   | 00/  |        |   |  |
|  | CERTIFICATE OF TRANSMISSION/MAILING |   |  |        |   |  |

Signature Date October 7, 2005 This collection of information is required by 3f CFR 1.6. The information/is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to 12 minutes to complete, including gathering, preparing, and submitting the completed application form to title USPTO. Time will vary depend of upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450 Alexandria, VA 22318-7450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Exandria, VA 22313-1450.

I hereby certify that this correspondence is being facsimile transmitted to the USPTO or deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450,

G. Gregory Schivley / Bryant E. Wade

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/17 (12-04)

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PATRA TRADE

Signature

**FEE TRANSMITTAL** for FY 2005

Effective 10/01/2004. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

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|                      | Complete if Known |  |
|----------------------|-------------------|--|
| Application Number   | 10/787,060        |  |
| Filing Date          | 02/25/2004        |  |
| First Named Inventor | Akiyoshi AOYAGI   |  |
| Examiner Name        | Thinh T. Nguyen   |  |
| Art Unit             | 2818              |  |
| Attorney Docket No.  | 9319S-000659      |  |

| METHOD OF PAYMENT (check all that apply) |  |             |              |                      |              | FEE C      | ALCULATION (continued)  |  |
|--|--|-------------|--------------|----------------------|--------------|------------|---|--|
|  |  |             | 3. AD        | DITION               | NAL FE       | ES         |   |  |
| ☐ Check ☐ Cr                             | edit card  | е           | Large        | Entity :             | Sma          | all Entity | !   |  |
| ☑ Deposit Account:                       |  |             |              | Fee                  | Fee          | Fee        | Fee Description   | Fee Paid   |
|  |  |             | Code<br>1051 | ( <b>\$</b> )<br>130 | Code<br>2051 | (\$)<br>65 | Surcharge - late filing fee or oath   |  |
| Deposit<br>Account                       | 50-3213  |             | 1051         | 50                   | 2052         | 25         | Surcharge - late provisional filing fee                                     | <del>                                     </del> |
| Number                                   |  |             | 1002         | •                    | 2002         | 20         | or cover sheet.   |  |
|  |  |             | 1053         | 130                  | 1053         | 130        | Non-English specification   |  |
| Deposit<br>Account                       | Epson R & D  |             | 1812         | 2,520                | 1812         | 2,520      | For filing a request for reexamination                                      |  |
| Name                                     | Epson R & D  |             | 1804         | 920°                 | 1804         | 920*       | Requesting publication of SIR prior to                                      | ,  |
| The Director is au                       | thorized to: (check all that apply)                                  |             | 1805         | 1,840*               | 1805         | 1.840°     | Examiner action  Requesting publication of SIR after                        |  |
| ☑ Charge fee(s) ir                       | dicated below  |             | 1000         | 1,040                | 1000         | 1,040      | Examiner action   |  |
|  | itional fee(s) during the pendency of this ap                        | plication   | 1251         | 120                  | 2251         | 60         | Extension for reply within first month                                      |  |
|  | dicated below, except for the filing fee lied deposit account.       |             | 1252         | 450                  | 2252         | 225        | Extension for reply within second   |  |
|  | FEE CALCULATION  |             | 1253         | 4000                 | 2252         | 540        | month   |  |
| 4 BASIC EI                               | LING FEE   | <del></del> | 1253         | 1020<br>1,590        | 2253<br>2254 | 510<br>795 | Extension for reply within third month<br>Extension for reply within fourth |  |
| · · ·                                    | mall Entity  |             | 12.54        | 1,550                | 2254         | 133        | month   |  |
|  | ee Fee Fee Description   |             | 1255         | 2,160                | 2255         | 1080       | Extension for reply within fifth month                                      |  |
|  |  | ee Paid     | 1401         | 500                  | 2401         | 250        | Notice of Appeal  |  |
| 1011 300 20                              | 011 150 Utility filing fee   |             | 1402         | 500                  | 2402         | 250        | Filing a brief in support of an appeal                                      |  |
| 1012 200 20                              | 012 100 Design filing fee  |             | 1403         | 1000                 | 2403         | 500        | Request for oral hearing  |  |
| 1013 200 20                              | 013 100 Plant filing fee   |             | 1452         | 500                  | 2452         | 250        | Petition to revive – unavoidable  |  |
| 1014 300 20                              | 014 150 Reissue filing fee   |             | 1453         | 1500                 | 2453         | 750        | Petition to revive – unintentional  |  |
| 1005 200 20                              | 005 100 Provisional filling fee                                      |             | 1501         | 1400                 | 2501         | 700        | Utility issue fee (or reissue)  |  |
| ,  | CURTOTAL (4)   |             | 1502         | 003                  | 2502         | 400        | Design issue fee  |  |
|  | SUBTOTAL (1)   | ) U         | 1460         | 130                  | 1460         | 130        | Petitions to the Commissioner   |  |
| 2. EXTRA CLAI                            | M FEES FOR UTILITY AND REISSU  | E           | 1807         | 50                   | 1807         | 50         | Processing fee under 37 CFR 1.17 (q   | " <b>——</b>                                      |
|  | Extra Fee from   | Fee         | 1806         | 180                  | 1806         | 180        | Submission of Information Disclosure<br>Stmt                                | 180  |
| Total Claims                             | -20 ** = 0 X = =   | Paid<br>0   |              |                      |              |            | Recording each patent assignment  |  |
| Independent                              |  |             | 8021         | 40                   | 8021         | 40         | per property (times number of   |  |
| Claims                                   | -3 ** = 0 X =  | 0           |              | ·                    |              |            | properties)   |  |
| Multiple L                               |  |             | 1809         | 790                  | 2809         | 395        | Filing a submission after final rejectio (37 CFR § 1.129(a))                | "  |
| Dependent                                | =  | 0           | 1810         | 790                  | 2810         | 395        | For each additional invention to be   |  |
| Large Entity                             | Small Entity   |             |              |                      |              |            | examined (37 CFR § 1.129(b))  |  |
| Fee Fee                                  | Fee Fee Description  |             | 1801         | 790                  | 2801         | 395        | Request for Continued Examination (RCE)                                     |  |
| Code (\$)                                | Code (\$)  |             | O11          |                      |              |            | (NOL)   |  |
| 1202 50<br>1201 200                      | 2202 25 Claims in excess of 20<br>2201 100 Independent claims in exc | one of 2    |              | e (speci             |              |            |   |  |
| 1201 200                                 | 2203 180 Multiple dependent claims in exc                            |             |              | ced by B             |              | •          | ` ' <u> </u>  | 0  |
|  | ** Reissue independent of  | -           |              |                      | EXAMI        |            | N FEES  |  |
| 1204 200                                 | 2204 100 Reissue independent ci                                      | G 0 V G.    | 1111         | 500                  | 2111         | 250        | Utility Search Fee  |  |
| 1205 50                                  | 2205 25 ** Reissue claims in exces                                   | s of 20 and | 1112         | 100                  | 2112         | 50         | Design Search Fee   |  |
|  | over original patent   |             | 1113         | 300                  | 2113         | 150        | Plant Search Fee  |  |
|  | SUBTOTAL (2) (\$) 0  |             | 1114         | 500                  | 2114         | 250        | Reissue Search Fee  |  |
|  | (\$)0  |             | 1311         | 200                  | 2311         | 100        | Utility Examination Fee   |  |
|  |  |             | 1312         | 130                  | 2312         | 65         | Design Examination Fee  |  |
|  |  |             | 1313         | 160                  | 2313         | 80         | Plant Examination Fee   |  |
| **ne number need in                      | usly paid, if greater; For Reissues, see above                       |             | 1314         | 600                  | 2314         | 300        | Reissue Examination Fee   |  |
| or number previous                       | usiy palu, ii greater, For Keissues, see above                       |             |              |                      |              |            | SUBTOTAL (4) (\$)0  |  |
| SUBMITTED BY                             |  |             |              |                      |              |            | Complete (if applicable)  |  |
|  | G. Gregory Schivley / Regist   | ration No.  |              | 27,                  | 382/         |            |   |  |
| Name (Print/Type)                        | Bryant E. Wade (Alton  | ration No.  | 1/           | 1116                 | 344          |            | Telephone (248) 641-1600  |  |



**PATENT** 

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

polication No.:

10/787,060

Filing Date:

02/25/2004

Applicant:

Akiyoshi Aoyaqi

**Group Art Unit:** 

2818

Examiner:

Thinh T. Nguyen

Title:

SEMICONDUCTOR DEVICE, ELECTRONIC DEVICE, ELECTRONIC APPARATUS. METHOD OF

MANUFACTURING A ...

Attorney Docket:

9319S-000659

Director of the United States Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

### **INFORMATION DISCLOSURE STATEMENT**

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

#### I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information requested to be considered by the Office (except unpublished U.S. patent applications) are listed on Form 1449 attached hereto.

#### II. <u>COPIES</u>

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) each unpublished U.S. application listed below in Section IV (i.e., including the specification, claims, and any drawing of the application, or that portion of the application which caused it to be listed, including any claims directed to that portion), except for such applications filed on or after June 30, 2003, pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 (OG Notice dated October 19, 2004); and (iv) all other information or that portion which caused it to be listed.

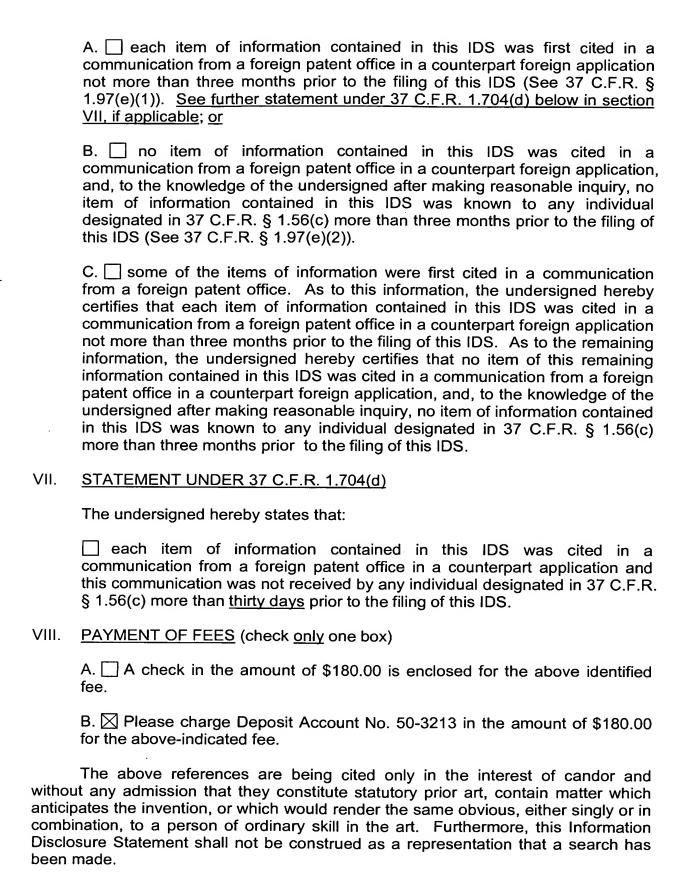
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|      | 1449 or on the copies of PT previously cited by or su applications which has bee U.S.C. § 120:  | O-892, but which are no<br>bmitted to the PTO  | t enclosed herewith, were in one of the following  |
|------|---|--|--|
|      | U.S. Serial Number  | <u>U.S.</u>  | Filing Date  |
|      | C. This is a PCT appli United States. A copy of the Examiner's information. The report are listed on the attack and for listing on any patent Search report was from the these references should have agreement and are believed (MPEP 1893.03(g).) | ne International Search one documents listed on the form 1449 for considerable us, EPO, or JPO search been supplied to the Us. | Report is attached for the the International Search sideration by the Examiner cation. If the International arch authorities, copies of JSPTO under the trilateral |
| III. | CONCISE EXPLANATION (   | OF THE RELEVANCE (c  | check at least one box)  |
|      | A. \( \sum \) Except as may be incorrection are integrated.   |  |  |
|      | B. A concise explanation other information listed that 37 C.F.R. § 1.98(a)(3)):   |  |  |
| •    | 1. See the attached related foreign applic  | • .  | ommunication regarding a   |
|      | <ol> <li>English transla<br/>attached Form</li> </ol>   |  | follows: As indicated on   |
|      | 3.   Other:   |  |  |
|      | C. The following addition:  | onal information is pro  | vided for the Examiner's   |
| IV.  | CROSS REFERENCE TO F  | RELATED APPLICATION  | <u>N(S)</u>  |
|      | A. The Examiner is advacantain(s) subject matter the bringing this(these) applications (do) not waive the contains.   | at may be related to the ation(s) to the Examine   | e present application. By r's attention, Applicant(s)  |
|      | Serial No.  | Filing Date  | Art Unit   |

| <b>v</b> .  | THIS IDS IS BEING FILED UNDER   |
|-------------|---|
|             | A.  |
|             | 1.  within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.  |
|             | 2.  within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.   |
|             | 3.  before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p). |
|             | 4.  before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.   |
|             | B.  |
|             | before the mailing date of either any Final Office Action under 37 C.F.R § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.  |
|             | 1. $\boxtimes$ No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).   |
|             | 2. See the certification below. No fee is required.   |
|             | C. 37 C.F.R. § 1.97(d):   |
|             | after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.   |
|             | 1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).   |
| <b>/</b> I. | CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)   |
|             | The undersigned hereby certifies that:  |



If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 50-3213 (Epson R&D).

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. § 1.16 or § 1.17 to Deposit Account No. 50-3213 (Epson R&D).

Respectfully submitted,

Dated: October 7, 2005

G/Gregory Schiyley

Bryant E. Wade Reg. No. 40,344

Harness, Dickey & Pierce, P.L.C. P.O. Box 828 Bloomfield Hills, Michigan 48303 (248) 641-1600

GGS/BEW/JAH



FORM HDP-1449 (Based on Form PTO-1449)

# PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 1 of 2

| ATTORNEY DOCKET No. | SERIAL NO. |
|---------------------|------------|
| 9319S-000659        | 10/787,060 |
| APPLICANT           |            |
| Akiyoshi AOYAGI     |            |
| FILING DATE         | GROUP      |
| 02/25/2004          | 2818       |

| U.S. P         | U.S. PATENT DOCUMENTS |                    |            |                   |                    |                                 |  |  |
|----------------|-----------------------|--------------------|------------|-------------------|--------------------|---------------------------------|--|--|
| Ref.<br>Desig. | Examiner's Initials   | Document<br>Number | Date       | Name              | Class/<br>Subclass | (If appropriate)<br>Filing Date |  |  |
| 1.             |                       | 6,023,097          | 02/08/2000 | Chiang et al.     |                    |                                 |  |  |
| 2.             |                       | 6,025,650          | 02/15/2000 | Tsuji et al.      |                    |                                 |  |  |
| 3.             |                       | 6,034,425          | 03/07/2000 | Chiang et al.     |                    |                                 |  |  |
| 4.             |                       | 6,288,445          | 09/22/2001 | Kimura            |                    |                                 |  |  |
| 5.             |                       | 2002/0017709       | 02/14/2002 | Yanagisawa et al. |                    |                                 |  |  |
| 6.             |                       | 6,489,678          | 12/03/2002 | Joshi             |                    |                                 |  |  |
| 7.             |                       | 6,573,119          | 06/03/2003 | Hirashima et al.  |                    |                                 |  |  |
| 8.             |                       | 6,611,063          | 08/26/2003 | Ichinose et al.   |                    |                                 |  |  |
| 9.             |                       | 6,627,991          | 09/30/2003 | Joshi             |                    |                                 |  |  |
| 10.            |                       | 6,731,009          | 05/04/2004 | Jones et al.      |                    |                                 |  |  |
| 11.            |                       | 2004/0222510       | 11/11/2004 | Aoyagi            |                    |                                 |  |  |
| 12.            |                       | 2004/0238954       | 12/02/2004 | Miyaji et al.     |                    |                                 |  |  |
| 13.            |                       | 6,903,458          | 06/07/2005 | Nathan            |                    |                                 |  |  |

| FORE           | FOREIGN PATENT DOCUMENTS |                    |            |         |                    |                    |         |
|----------------|--------------------------|--------------------|------------|---------|--------------------|--------------------|---------|
| Ref.<br>Desig. | Examiner's Initials      | Document<br>Number | Date       | Country | Class/<br>Subclass | Translation<br>Yes | *<br>No |
| 1.             |                          | JP 10-340928       | 12/22/1998 | JAPAN   |                    | Abstract           |         |

| Examiner: | Date Considered: |
|-----------|------------------|
|           | Salo Considered. |

### FORM HDP-1449 (Based on Form PTO-1449)

## PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

Sheet 2 of 2

|                     |            | - |
|---------------------|------------|---|
| ATTORNEY DOCKET NO. | SERIAL NO. |   |
| 9319S-000659        | 10/787,060 |   |
| APPLICANT           |            |   |
| Akiyoshi AOYAGI     |            |   |
| FILING DATE         | GROUP      |   |
| 02/25/2004          | 2818       |   |

| OTHER DOCUMENTS (including Author, Title, Date, Pertinent Pages, etc.) |                        |  |  |  |
|--|------------------------|--|--|--|
| Ref.<br>Desig.   | Examiner's<br>Initials |  |  |  |
| 1.   |                        |  |  |  |

\*One or more of the English translation documents submitted herewith may be Abstracts only or partial machine created translations from the Japanese Patent Office. As such, the submitter does not necessarily vouch for their accuracy. Additional information may be obtained from the Japanese Patent Office web site at <a href="https://www.ipo.go.ip">www.ipo.go.ip</a>

| Examiner: | Date Considered: |
|-----------|------------------|
|           |                  |